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NOTICE OF ALLOWANCE AND FEE(S) DUE

23405 **EXAMINER** HESLIN ROTHENBERG FARLEY & MESITI PC 5 COLUMBIA CIRCLE PIZARRO CRESPO, MARCOS D ALBANY, NY 12203 ART UNIT CLASS-SUBCLASS 2814 257-63 DATE MAILED: 02/26/2002 FIRST NAMED INVENTOR CONFIRMATION NO. APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. Charles W. Eichelberger 1109.005 4726 09/502,078 02/10/2000

TITLE OF INVENTION: INTEGRATED CIRCUIT STRUCTURES AND METHODS EMPLOYING A LOW MODULUS HIGH ELONGATION PHOTODIELECTRIC

			_				
٢	TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
_	17	nonprovisional	YES	\$640	\$0	\$640	05/28/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

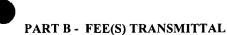
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Complete and mail this form, together with applicable fee(s), to:

Box ISSUE FEE

Assistant Commissioner for Patents

Washington, D.C. 20231

where appropriate All fi	urther correspondence in ed below or directed ot	icluding t	the Patent, advanc	ce orders and notifica	tion c	t maintenance tees	willt	e mailed to the current	gh 4 should be completed correspondence address as rate "FEE ADDRESS" for		
23405	ENCE ADDRESS (Note: Legib 7590 02/20 HENBERG FAR	6/2002			oth	er accompanying	papers	nailing below can on asmittal. This certificat is. Each additional pape we its own certificate of	ly be used for domestic e cannot be used for any er, such as an assignment mailing.		
5 COLUMBIA CIRCLE ALBANY, NY 12203					en	nereby certify that ited States Postal St velope addressed licated below.	this	Certificate of Mailing Fee(s) Transmittal is the with sufficient postage to Box Issue Fee add	ificate of Mailing (s) Transmittal is being deposited with the th sufficient postage for first class mail in an ox Issue Fee address above on the date		
					<u> </u>				(Depositor's name)		
									(Signature)		
									(Date)		
APPLICATION NO.	FILING DATE	- 1		FIRST NAMED INVE	VTOR		ATT(ORNEY DOCKET NO.	CONFIRMATION NO.		
09/502,078	02/10/2000	·		Charles W. Eichelbe			AII	1109.005	4726		
TITLE OF INVENTION PHOTODIELECTRIC	ON: INTEGRATED	CIRCUI	T STRUCTURE	S AND METHOI	DS E	EMPLOYING A	LOW	MODULUS HIGH	ELONGATION		
TOTAL CLAIMS	APPLN. TYPE	SMA	ALL ENTITY	ISSUE FEE	<u>.</u>	PUBLICATION FE	E	TOTAL FEE(S) DUE	DATE DUE		
17	nonprovisional		YES	\$640		\$0		\$640	05/28/2002		
EXA	MINER		ART UNIT	CLASS-SUBC	CLASS						
PIZARRO CRE	SPO, MARCOS D		2814	257-6330	00						
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. PTO/SB/47) attached. 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)											
PLEASE NOTE: Unlest been previously submit (A) NAME OF ASSIG	ted to the USPTO or is I	being sub	mitted under sepa (B	arate cover. Completi) RESIDENCE: (CIT	ion of 'Y and	this form is NOT a	a subst	itute for filing an assig	e when an assignment has niment.		
4a. The following fee(s)	are enclosed:			. Payment of Fee(s):							
☐ Issue Fee				A check in the amous Payment by credit ca		` '		đ			
☐ Publication Fee ☐ Advance Order - # o	The Commissioner is	here	y authorized by ch	arge t	he required fee(s), or c	redit any overpayment, to					
Advance Order - # 0	Copies		De	posit Account Numb	er	(e	nclose	an extra copy of this f	orm).		
The COMMISSIONER (application identified abo		ADEMA	ARKS is requested	to apply the Issue Fe	ee and	Publication Fee (i	f any)	or to re-apply any pre	viously paid issue fee to the		
(Authorized Signature)			(Date)				-				
NOTE; The Issue Fee other than the applicar interest as shown by the Burden Hour Statement depending on the needs to complete this form and Trademark Office, FORMS TO THIS A Assistant Commissione	nt; a registered attorne e records of the United S t: This form is estimated of the individual case, should be sent to the Washington, D.C. 202: DDRESS, SEND FEE	y or age States Pat d to take Any com hief Info 31. DO N	nt; or the assignment and Trademar 0.2 hours to compare to the amount on the amount officer, NOT SEND FEES THIS FORM T	ee or other party in the Office. plete. Time will vary ount of time required United States Patent S OR COMPLETED							

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO. FILING DATE		LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/502,078 02/10/2000		02/10/2000	Charles W. Eichelberger	1109.005	4726		
23405	7590	02/26/2002		EXAMIN	EXAMINER		
HESLIN ROT	HENBER	RG FARLEY &	z MESITI PC	PIZARRO CRESPO, MARCOS D			
	COLUMBIA CIRCLE ALBANY, NY 12203		ſ	ART UNIT	PAPER NUMBER		
•	UNITED STATES			2814			
			I	DATE MAILED: 02/26/2002			

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

			•				
	Application No.	Applicant(s)					
	09/502,078	EICHELBERGER E	Т ДІ				
Notice of Allowability	Examiner	Art Unit					
	Maraaa D. Dimarra Crassa	2044					
	Marcos D. Pizarro-Crespo	2814					
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	OR REMAINS) CLOSED in this apport of the appropriate communication GHTS. This application is subject to	plication. If not include will be mailed in due	ed course. THIS				
1. X This communication is responsive to the amendment (paper no. 6) filed on 12/18/2001.							
2. The allowed claim(s) is/are 1-17.							
3. The drawings filed on are accepted by the Examiner	•						
4. ☐ Acknowledgment is made of a claim for foreign priority unda) ☐ All b) ☐ Some* c) ☐ None of the:	er 35 U.S.C. § 119(a)-(d) or (f).						
1. Certified copies of the priority documents have	been received.						
2. Certified copies of the priority documents have	been received in Application No	·					
3. Copies of the certified copies of the priority doc	uments have been received in this	national stage applicat	ion from the				
International Bureau (PCT Rule 17.2(a)).		• .,					
* Certified copies not received:							
5. Acknowledgment is made of a claim for domestic priority un	der 35 U.S.C. § 119(e) (to a provisi	onal application).					
(a) \square The translation of the foreign language provisional ap	oplication has been received.						
6. \square Acknowledgment is made of a claim for domestic priority un	der 35 U.S.C. §§ 120 and/or 121.						
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF							
INFORMAL PATENT APPLICATION (PTO-152) which gives reason	on(s) why the oath or declaration is	deficient.					
 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftspers 	on's Patent Prawing Poviour / PTO	049) ottoched					
1) hereto or 2) to Paper No	on's Patent Diawing Review (P10-	946) attached					
,	properties filed 18 December 2001	which has been enne	wad by the				
Examiner.							
(c) including changes required by the attached Examiner's	(c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No						
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.							
 DEPOSIT OF and/or INFORMATION about the depos attached Examiner's comment regarding REQUIREMENT FOR THE 	it of BIOLOGICAL MATERIAL m HE DEPOSIT OF BIOLOGICAL MAT	nust be submitted. N FERIAL.	ote the				
Attachment(s)							
 Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) Information Disclosure Statements (PTO-1449), Paper No	4∏ Interview Summa 6⊠ Examiner's Amer	I Patent Application (F ary (PTO-413), Paper I adment/Comment ment of Reasons for A	No				

Art Unit: 2814

Attorney's Docket Number: 1109.005

Filing Date: 2/10/2000

Claimed Foreign Priority Date: none

Applicant(s): Eichelberger et al.

Examiner: Marcos D. Pizarro-Crespo

DETAILED ACTION

This Office action responds to the amendment (paper no. 6) filed on 12/18/2001.

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 12/18/2001 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

EXAMINER'S AMENDMENT

- 2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Kevin Radigan, Esq., reg. no. 31,789, on 2/22/2002.
- 4. The application has been amended as follows:

In the claims

Cancel claims 18-41.

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In line 15 of claim 1, insert --; wherein the LMHE dielectric has a Young's modulus of less than 50,000 psi, and has an ultimate elongation property of at least twenty percent-- after "expansion".

In line 4 of claim 6, insert -- of said-- after "one".

In line 5 of claim 6, replace "or" with --and--.

In line 6 of claim 6, delete "layer".

In line 6 of claim 9, delete "layer".

In line 7 of claim 9, insert -- of said-- after "one".

In line 8 of claim 9, replace "or" with --and--.

In line 1 of claim 10, insert --the-- before "LMHE".

In line 2 of claim 10, delete "layer".

In line 3 of claim 13, delete "layer".

Reasons for Allowance

- 5. Claims 1-17 are allowed.
- 6. The following is an examiner's statement of reasons for allowance:
- 7. None of the references of record shows or can be fairly combined to show a structure for absorbing stress between a first electrical structure and a second electrical structure, said structure comprising a low-modulus high-elongation (high-strain) dielectric absorbing stress between the electrical structures dues to their different thermal-expansion coefficients, wherein <u>low modulus</u> is defined as a Young's modulus of less than 50,000 psi and <u>high elongation</u> is defined as an ultimate elongation property of at least 20%.

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8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- 9. Papers related to this application may be submitted directly to Art Unit 2814 by facsimile transmission. Papers should be faxed to Art Unit 2814 via the Art Unit 2814 Fax Center located in Crystal Plaza 4, room 3C23. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The Art Unit 2814 Fax Center number is (703) 308-7722 or -7724. The Art Unit 2814 Fax Center is to be used only for papers related to Art Unit 2814 applications.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Marcos D. Pizarro-Crespo** at **(703)** 308-6558 and between the hours of 8:30 AM to 7:00 PM (Eastern Standard Time) Monday through Thursday or by e-mail via <u>Marcos.Pizarro@uspto.gov</u>. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri, can be reached on (703) 306-2794.
- 11. Any inquiry of a general nature or relating to the status of this application should be directed to the **Group 2800 Receptionist** at **(703) 308-0956**.

Art Unit: 2814

12. The following list is the Examiner's field of search for the present office action:

Field of Search	Date
U.S. Class / Subclass(es): 257/678-733	2/22/2002
Other Documentation:	
Electronic Database(s): EAST (USPAT, EPO, JPO)	2/22/2002

Howard Weiss

Patent Examiner Art Unit 2814 Marcos D. Pizarro-Crespo

Patent Examiner (Art Unit 2814)

Tel. 703-308-6558

e-mail: marcos.pizarro@uspto.gov

MDP/mdp February 22, 2002